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DT11 Rec'd PCT/PTO JUN 19 2002

Customized FORM PTO-1390 (REV. 12-2001) U.S. DEPARTMENT OF COMMERCE PATENT & TRADEMARK OFF.

ATTORNEY DOCKET NO. P07500US00/BAS

TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371

U.S. APPLICATION NO. *(If known. see 37CFR 1.5)* 10/031,167

INTERNATIONAL APPLICATION NO.	INTERNATIONAL FILING DATE	PRIORITY DATE CLAIMED
PCT/FR00/02076	07/19/2000	07/20/1999

TITLE OF INVENTION: NUCLEIC ACIDS ENCODING PEPTIDES HAVING THE BIOLOGICAL ACTIVITY...

APPLICANT(S) FOR DO/EO/US: WAHBI et al.

Applicant herewith submits to the US Designated/Elected Office (DO/EO/US) the following items and other information:

___ 1. This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.

X 2. This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 USC 371.

___ 3. This is an express request to begin national examination procedures (35 USC 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.

___ 4. The US has been elected by the expiration of 19 months from the priority date (Article 31).

___ 5. A **copy** of the International Application as filed (35 U.S.C. 371 (c)(2))

___ a. is attached hereto (required only if not communicated by the International Bureau).

___ b. has been communicated by the International Bureau.

___ c. is not required, as the application was filed in the United States Receiving Office (RO/US).

X 6. An English **translation** of the International Application as filed (35 U.S.C. 371(c)(2)).

X a. is attached hereto.

___ b. has been previously submitted under 35 U.S.C. 154(d)(4).

___ 7. Amendments to the claims of the International Appln. under PCT Article 19 (35 USC 371 (c)(3))

___ a. are attached hereto (required only if not communicated by the International Bureau).

___ b. have been communicated by the International Bureau.

___ c. have not been made; however, the time limit for making such amendments has NOT expired.

___ d. have not been made and will not be made.

___ 8. An English translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).

X 9. An **oath** or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).

___ 10. An English translation of the annexes to the Int'l Pre. Exam. Report under PCT Article 36 (35 USC 371(c)(5)).

Items 11 to 20 below concern document(s) or information included:

___ 11. An **Information Disclosure Statement** under 37 C.F.R. 1.97 and 1.98.

X 12. An **Assignment** document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.

X 13. A **First preliminary amendment**.

___ 14. A Second or Subsequent preliminary amendment.

___ 15. A substitute specification.

___ 16. A change of power of attorney and/or address letter.

___ 17. A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 & 35 USC 1.821-825.

___ 18. A second copy of the published international application under 35 USC 154(d)(4).

___ 19. A second copy of the English translation of the international application under 35 USC 154(d)(4).

X 20. Other items or information:

X A copy of the Notification of Missing Requirements under 35 U.S.C. 371.

___

X In the event that a petition for extension of time is required to be submitted herewith, and in the event that a separate petition does not accompany this response, applicant hereby petitions under 37 CFR 1.136(a) for an extension of time of as many months as are required to render this submission timely. Any fee is authorized in 17(c).

Date: 19 June 2002

LARSON & TAYLOR, PLC • 1199 North Fairfax St. • Suite 900 • Alexandria, VA 22314

U.S. APPLICATION NO. *(If known)*	INTERNATIONAL APPLICATION NO.	ATTORNEY DOCKET NO.
10/031,167	PCT/FR00/02076	P07500US00/BAS

	CALCULATIONS *PTO USE ONLY*
X 21. **The following fees are submitted:**	
Basic National Fee (37 CFR 1.492 (a) (1)-(5):	
____ Neither Int'l Prelim. Exam. fee nor Int'l Search fee paid to USPTO **$1040**	
____ Search Report has been prepared by the EPO or JPO **$ 890**	
____ No Int'l Prelim. Ex. fee paid to USPTO but Int'l Search fee paid to USPTO **$ 740**	
____ International preliminary examination fee paid to USPTPO **$ 710**	
____ Int'l Prelim. Ex. fee paid to USPTO & all claims satisfied PCT Art. 33(1)-(4) **$ 100**	
ENTER APPROPRIATE BASIC FEE AMOUNT =	$
X Surcharge of **$130** for furnishing the oath or declaration later than [ ] 20 mos. [ ] 30 mos. + from the earliest claimed priority date (37 CFR 1.492(e)).	$ 130.00

CLAIMS	*NUMBER FILED*	*NUMBER EXTRA*	*RATE*	
Total Claims	15 - 20 =	0	X **$18** =	$
Independent Claims	4 - 03 =	1	X **$84** =	$ 84.00
____ Multiple Dependent Claim(s) (if applicable)			+ **$280** =	$
TOTAL OF ABOVE CALCULATIONS =				**$ 214.00**
____ Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by ½.			-	$
SUBTOTAL =				**$ 214.00**
X Processing fee of **$130** for furnishing the **English translation** later than [ ] 20 mos. [ ] 30 mos. + from the earliest claimed priority date (37 CFR 1.492(f)).				$ 130.00
TOTAL NATIONAL FEE =				**$ 344.00**
X Fee for recording the enclosed **assignment** (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). **$40** per property			+	$ 40.00
TOTAL FEES ENCLOSED =				**$ 384.00**
			Amount to be	*Refunded* $
				Charged $

06/21/2002 LLANDGRA 00000077 10031167
01 FC:154 130.00 OP
02 FC:964 84.00 OP
03 FC:156 130.00 OP

X a. A **check** in the amount of $ 384.00 to cover the above fees is enclosed.

____ b. Please charge my Deposit Account No. 12-0555 in the amount of $ to cover the above fees.

X c. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit overpayment to Deposit Account No. 12-0555.

Note: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

B. Aaron Schulman
At the address (below) of **CUSTOMER NO. 00881:**

LARSON & TAYLOR, PLC
1199 NORTH FAIRFAX ST.
SUITE 900
ALEXANDRIA, VA 22314

Signature: B. Aaron Schulman

Name: B. Aaron Schulman

Reg. No.: 31,877

Phone No.: 703-739-4900

Date: 19 June 2002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. :

U.S. National Serial No. :

Filed :

PCT International Application No. : PCT/FR00/02076

VERIFICATION OF A TRANSLATION

I, the below named translator, hereby declare that:

My name and post office address are as stated below;

That I am knowledgeable in the French language in which the below identified international application was filed, and that, to the best of my knowledge and belief, the English translation of the amended sheets of the international application No. PCT/FR00/02076 is a true and complete translation of the amended sheets of the above identified international application as filed.

I hereby declare that all the statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the patent application issued thereon.

Date: February 8, 2002

Full name of the translator : Elaine Patricia PARRISH
For and on behalf of RWS Group plc

Post Office Address : Europa House, Marsham Way,
Gerrards Cross, Buckinghamshire,
England.

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents, Box PCT
United States Patent and Trademark Office
Washington, D.C. 20231
www.uspto.gov

U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
10/031,167	Kamal Wahbi	P07500US00/BAS

INTERNATIONAL APPLICATION NO.	
PCT/FR00/02076	
I.A. FILING DATE	PRIORITY DATE
07/19/2000	07/20/1999

00881
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CONFIRMATION NO. 4991

371 FORMALITIES LETTER

OC000000007922013

Date Mailed: 04/22/2002

NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as an Elected Office (37 CFR 1.495):

6-22-2002

- U.S. Basic National Fees
- Priority Document
- Copy of IPE Report
- Copy of references cited in ISR
- Copy of the International Application
- Copy of the International Search Report
- Request for Immediate Examination

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Translation of the application into English.
- Processing fee for providing the translation of the application and/or the Annexes later than the appropriate 30 months from the priority date (37 CFR 1.492(f)).
- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date.
- **$130** Surcharge for providing the oath or declaration later than the appropriate 30 months months from the priority date (37 CFR 1.492(e)) is required.

ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTH FROM THE DATE OF THIS NOTICE OR BY 22 or 32 MONTHS (where 37 CFR 1.495 applies) FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

SUMMARY OF FEES DUE:

Total additional fees required for this application is **$260** for a Large Entity:

- **$130** Late oath or declaration Surcharge.
- **$130** for English translation surcharge required.

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

*A copy of this notice **MUST** be returned with the response.*

PATRICIA A BOOKER

Telephone: (703) 305-3738

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/031,167	PCT/FR00/02076	P07500US00/BAS

FORM PCT/DO/EO/905 (371 Formalities Notice)

CLAIMS

1. A nucleic acid encoding a peptide having the biological activity of sorbin, said nucleic acid comprising the nucleotide sequence selected from:

a) the sequence SEQ ID No. 1;

b) the sequence SEQ ID No. 3;

c) the sequence SEQ ID No. 5;

d) a nucleotide sequence homologous to the sequence SEQ ID No. 1, No. 3 or No. 5; and

e) at least one nucleotide fragment of said sequence a), b), c) or d).

2. The nucleic acid as claimed in claim 1, said nucleic acid comprising a nucleotide sequence selected from the sequence SEQ ID No. 6 to 8 and a nucleotide sequence homologous to the sequence SEQ ID No. 6 to 8.

3. A cloning and/or expression vector comprising a nucleotide sequence as defined in either of claims 1 and 2.

4. A host cell transformed with the vector as claimed in claim 3.

5. A method for producing recombinant peptide having the biological activity of sorbin, said method comprising the steps consisting in:

i) inserting a nucleotide sequence as defined in either of claims 1 or 2 into an expression vector, said nucleotide sequence being functionally linked with elements which allow the regulation of its expression;

ii) transforming a host cell with the vector thus obtained;

iii) culturing said host cell under conditions which allow the expression of said nucleotide sequence;

iv) recovering the recombinant peptide expressed;

v) optionally purifying said peptide;

vi) optionally carrying out an amidation of the peptide produced.

6. An isolated recombinant peptide obtained using the method as claimed in claim 5.

7. A recombinant peptide having the biological activity of sorbin and comprising the amino acid sequence selected from the sequences SEQ ID No. 2, SEQ ID No. 4 and SEQ ID No. 11.

8. A pharmaceutical composition comprising a nucleic acid as claimed in either of claims 1 and 2 or a peptide as claimed in either of claims 6 and 7.

9. An oligonucleotide comprising the sequences SEQ ID No. 12 to SEQ ID No. 20 or the sequences complementary thereto.

10. A method for detecting the expression of sorbin in a cell or tissue sample, comprising the steps consisting in:

- preparing the RNA of said sample;
- bringing said RNA obtained into contact with a probe having a nucleotide sequence capable of hybridizing specifically with a nucleic acid encoding a peptide having the biological activity of sorbin, as defined in claim 1;
- detecting the presence of mRNA which hybridizes with this probe, indicating the expression of a peptide having the biological activity of sorbin in the sample.

11. A method for detecting, *in vitro*, the expression of sorbin in cells or a tissue by *in situ* hybridization, comprising the steps consisting in:

- bringing said cells or said tissue into contact with a probe having a nucleotide sequence capable of hybridizing specifically with a nucleic acid encoding a peptide having the biological activity of sorbin, as defined in claim 1;
- detecting the presence of mRNA which hybridizes with this probe, indicating the expression of the peptide having the biological activity of sorbin.

12. A monoclonal or polyclonal antibody directed specifically against human sorbin, or a fragment of said antibody capable of binding specifically to human sorbin.

13. A method for detecting and/or immuno-assaying human sorbin in a biological sample, in which:

i) said biological sample is brought into contact with an antibody as defined in claim 12, labeled in a detectable manner;

ii) the formation of an antibody-human sorbin complex, indicating the presence of human sorbin in said sample, is observed.